

# COMMONWEALTH of VIRGINIA

# DEPARTMENT OF ENVIRONMENTAL QUALITY TIDEWATER REGIONAL OFFICE

Doug Domenech Secretary of Natural Resources 5636 Southern Boulevard, Virginia Beach, Virginia 23462 (757) 518-2000 Fax (757) 518-2009 www.deq.virginia.gov David K. Paylor Director

Maria R. Nold Regional Director

December 3, 2012

Mr. Rowland L. Taylor
Executive Director
Southeastern Public Service Authority of Virginia
723 Woodlake Drive
Chesapeake, Virginia 23320

Location: Suffolk Registration No.: 61341

AFS Id. No.: 51-800-00121

Dear Mr. Taylor:

Attached is a renewal permit (Title V operating permit) and accompanying Statement of Basis (SOB) for the operation of the Southeastern Public Service Authority of Virginia - Regional Landfill pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and a civil penalty. Please read all permit conditions carefully.

In evaluating the application and arriving at a final decision to issue the permit, the Virginia Department of Environmental Quality deemed the application complete on September 17, 2012 and solicited written public comments by placing a newspaper advertisement in the Tidewater News on Wednesday, October 17, 2012. The thirty day comment period (provided for in 9 VAC 5-80-270) expired on Friday, November 16, 2012 with no comments having been received in this office.

This approval to operate shall not relieve Southeastern Public Service Authority of Virginia of the responsibility to comply with all other local, state and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. 9 VAC 5-170-200 provides that you may request direct consideration of the decision by the Board if the Director of the DEQ made the decision. Please consult the relevant regulations for additional requirements for such requests.

Mr. Rowland L. Taylor Southeastern Public Service Authority of Virginia Reglonal Landfill December 3, 2012 Page 2

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
PO Box 1105
Richmond, VA 23218-1105

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have questions concerning this permit, please contact Mr. James A. White, Jr. either by phone at (757) 518-2180 or by e-mail at <a href="mailto:james.white@deq.virginia.gov">james.white@deq.virginia.gov</a>.

Sincerely.

Troy D. Breathwaite

Regional Air Permits Manager

TDB/JIM/61341\_008\_12\_T5Renewal\_cvrltr\_SPSA.doc

Attachments:

**Operating Permit** 

Statement of Basis

CC:

Manager, Data Analysis (electronic file submission)

Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III (electronic file submission)

Manager/Inspector, Air Compliance (hard copy)



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# Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:

Southeastern Public Service Authority of Virginia

Co-Operator Name:

Suffolk Energy Partners, L.L.C.

Facility Name:

SPSA Regional Landfill

**Facility Location:** 

One Bob Foeller Drive, Suffolk, Virginia 23434

Registration Number:

61341

Permit Number:

TRO-61341

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 4 through 29) State Only Enforceable Requirements (Page 29)

> <u>December 5, 2012</u> Effective Date

> December 4, 2017

**Expiration Date** 

Regional Director

December 3 2012

Signature Date

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### **Facility Information**

#### **Permittee**

Southeastern Public Service Authority of Virginia 723 Woodlake Drive Chesapeake, Virginia 23320

# Responsible Official Mr. Rowland L. Taylor

Executive Director

#### **Facility**

SPSA Regional Landfill One Bob Foeller Drive Suffolk, Virginia 23434

#### Contact Person

Mr. Scott D. Whitehurst Landfill and Environmental Superintendent 757-961-3582 / cell 757-449-5349

#### Co-Operator

Suffolk Energy Partners, L.L.C. Two Bob Foeller Drive Suffolk, Virginia 23434

#### Contact Person

Jamie Margaritas Facility Manager 757-538-2513 / cell 757-576-9576

#### County-Plant Identification Number: 51-800-00121

Facility Description: SIC Code 4953, NAICS Code 562212 - The source is a municipal solid waste (MSW) landfill with a tire shredder installation, leachate collection system, and a landfill gas collection and control system (GCCS). An energy recovery plant managed by Suffolk Energy Partners, L.L.C. operates combustion equipment, which includes four (4) landfill gas (LFG) fired internal combustion (IC) Caterpillar engines, each powering an electrical generator, and a flare. Power Generation (Registration No. 61137) was issued an NSR permit on August 18, 1995 for the operation of these combustion devices. Treated LFG is sold and piped directly to BASF Corporation (formally Ciba Specialty Chemicals, Inc.) for use as supplemental boiler fuel. Any excess LFG produced after supplying the IC gas engines and BASF is combusted on site by the flare. On July 29, 2011 an NSR permit was issued to SPSA for the replacement of the 1,500 scfm main burner used on the existing exempted flare with a new burner rated at 3,000 scfm.

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## **Emission Units**

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burni	ng Equipme	ent					
FL-1B	STK0	LFG Specialties Utility Flare	3,000 scfm	No additional devices	FL-1B	NMOCs	July 29, 2011
GEN-1	STK1	Caterpillar generator set G3516, #4EK00178	325 scfm LFG 820 kW	No additional devices	GEN-1	NMOCs	August 18, 1995
GEN-2	STK2	Caterpillar generator set G3516, #4EK00179	325 scfm LFG 820 kW	No additional devices	GEN-2	NMOCs	August 18, 1995
GEN-3	STK3	Caterpillar generator set G3516, #4EK00177	325 scfm LFG 820 kW	No additional devices	GEN-3	NMOCs	August 18, 1995
GEN-4	STK4	Caterpillar generator set G3516, #4EK00175	325 scfm LFG 820 kW	No additional devices	GEN-4	NMOCs	August 18, 1995
Process A							
LFO-1	1A.	Landfill operations (Cells I - VII)	38,141,510 yd <sup>3</sup>	LFG collection and control system	GCCS	NMOCs	None
Process B					•		
GCCS	1B	LFG collection and control system	5,957 scfm	Combustion devices	GCCS	NMOCs	None
MAINT	1C	Vehicle and other facility equipment maintenance	N/A	None		VOCs	None
08	N/A	Fugitive dust	N/A	None		PM	None

<sup>\*</sup> The Size/Rated Capacity and PCD efficiency is provided for informational purposes only and is not an applicable requirement

# Landfill Operations and Combustion Equipment Requirements - (emission unit ID# LFO-1, Fl-1B, GEN-1, GEN-2, GEN-3, and GEN-4)

Landfill Operation Requirements - (emission unit ID# GCCS) - Gas Collection and 1. Control System - Prior to December 7, 2004, the permittee installed an active gas collection and control system (GCCS), approved by the Administrator, that captures the landfill gas (LFG) generated within the landfill. The GCCS installed at the Suffolk Regional Landfill meets the requirements stipulated in 40 CFR 60.752 (b)(2)(ii)(A). The active collection system shall be designed to handle the maximum expected LFG flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment. The maximum expected collection rate for the five (5) year term of this permit is 5,957 scfm. The system shall collect LFG from each cell in the landfill in which solid waste has been placed for a period of five (5) years or more if active or two (2) years or more if closed or at final grade. The system shall collect gas at a sufficient extraction rate to meet all operational requirements. Also, the system shall be designed to minimize the off-site migration of subsurface gas. Based on the SPSA report of June 6, 2002 describing the 2002 calculated NMOC rate of 66.99 Mg, SPSA was required to submit a Gas Collection and Control System Design Plan by June 6, 2003. The original GCCS Design Plan was received at DEO on June 6, 2003 with an updated version dated June 28, 2007 received on July 6, 2007. A subsequent GCCS Design Plan and Landfill Odor Control Plan update was received by the DEQ on July 8, 2010.

(9 VAC 5-80-110, 40 CFR 60.752 (b)(2)(ii)(A) and 40 CFR 60.753(a))

- 2. Landfill Operation Requirements (emission unit ID# FL-1B, GEN-1, GEN-2, GEN-3, GEN-4, and OS-1) NMOC Emission Controls The GCCS shall route all collected LFG to one or more of the following combustion devices where it is to be combusted: the candlestick flare, FL-1B, the four (4) LFG-fired internal combustion engine driven generators, GEN-1, GEN-2, GEN-3, GEN-4 and the off-site devices, OS-1. During normal operations, all of the LFG collected by the GCCS shall be routed to one or more of these devices for the destruction of NMOCs. The candlestick flare, FL-1B shall be designed and operated in accordance with 40 CFR 60.18.

  (9-VAC 5-80-110, 9 VAC 5-80-40, 40 CFR 60.752 (b)(2)(iii), 60.756(b)(1), 60.753(e) and Conditions 4 and 5 of NSR permit issued July 29, 2011)
- 3. Landfill Operation Requirements (emission unit ID# GCCS) Gas Collection and Control System The permittee shall operate the GCCS such that negative pressure is maintained at each active wellhead except in case of fire or increased well temperature. Additionally, the permittee shall operate each interior, active wellhead in the LFG collection system such that the gas temperature is less than 55 degrees Centigrade and with either a nitrogen level of less than 20 percent (20%) or an oxygen level of less than five percent (5%).

(9 VAC 5-80-110 and 40 CFR 60.753(b) & (c))

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- 4. Landfill Operation Requirements (emission unit ID# GCCS) Control of Surface Methane The permittee shall operate the GCCS such that the surface methane concentration is less than 500 ppm above the background level at the surface of the landfill. The permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of LFG, such as distressed vegetation and cracks or seeps in the surface cover. Areas with steep slopes or other dangerous areas such as the working face of the landfill may be excluded after receiving approval from the Director of the DEQ Tidewater Regional Office. (9 VAC 5-80-110 and 40 CFR 60.753(d))
- 5. Landfill Operation Requirements (emission unit ID# GCCS) Operating Parameters The provisions for oxygen (or nitrogen), temperature, pressure and surface methane concentrations shall apply at all times except during periods of start-up, shut down, or malfunction, provided that the duration of start-up, shut down, or malfunction does not exceed five (5) days for the GCCS and does not exceed one (1) hour for the LFG treatment or combustion devices.
  (9 VAC 5-80-110 and 40 CFR 60.755(e))
- 6. Landfill Operation Requirements (emission unit ID# GCCS) GCCS Shutdown The permittee shall operate the GCCS such that all collected LFG is routed to one or more of the combustion devices. In the event that the collection and control system malfunctions, the GCCS gas moving equipment shall be shut down and all vents to the atmosphere shall be closed within one (1) hour.

  (9 VAC 5-80-110 and 40 CFR 60.753(e))
- 7. Landfill Operation Requirements (emission unit ID# GCCS) Placement of New Wells The permittee shall place each new well or design component as specified in the GCCS design plan and shall install wells no later than 60 calendar days after the date on which the initial solid waste has been in place in any cell or group of cells for a period of five (5) years or more if active or two (2) years or more if closed or at final grade. (9 VAC 5-80-110 and 40 CFR 60.755(b))
- 8. Landfill Operation Requirements NSPS, Subpart WWW The municipal solid waste landfill, as well as the GCCS shall be constructed and operated in accordance with 40 CFR 60 Subpart WWW. When 'The Administrator' is prescribed as the recipient of reports required by this Subpart, it shall be understood to be the Director of the DEQ Tidewater Regional Office.

  (9 VAC 5-80-110 and 40 CFR 60.750 through 40 CFR 60.759)
- Combustion Equipment Requirements (emission unit ID# FL-1B, GEN-1, GEN-2, GEN-3, and GEN-4) Approved Fuel The approved fuel for the four (4) gas-fired engines and candlestick flare is LFG. No makeup fuel is authorized in conjunction with the operation of the GCCS. Any request to add a new fuel type may require a permit modification.
   (9 VAC 5-80-110, Condition 4 of NSR permit issued August 18, 1995, and Condition 11

of NSR permit issued July 29, 2011)

- 10. Combustion Equipment Requirements (emission unit ID# GEN-1, GEN-2, GEN-3, and GEN-4) Fuel Throughput Limit The four (4) LFG-fired engines (combined) shall consume no more than 656 million cubic feet (scf) of LFG per year at standard atmospheric conditions (68°F and 14.7 psi), calculated monthly as the sum of each consecutive 12 month period.

  (9 VAC 5-80-110 and Condition 5 of NSR permit issued August 18, 1995)
- 11. **Fugitive Dust Emissions** Fugitive dust and fugitive emission controls shall include the following, or equivalent, as a minimum:
  - a. All cover material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions as appropriate;
  - b. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals or equivalent methods approved by the DEQ;
  - c. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. These measures shall include paving the entrance road to the facility up to the vicinity of the process areas. Trucks leaving the site shall have clean wheels achieved by use of a wheel washer or equivalent. Dirt, product or raw material spilled or tracked onto paved surfaces shall be promptly removed or wetted to prevent particulate matter from becoming airborne; and
  - d. Effective speed controls for through traffic shall be implemented at the facility. (9 VAC 5-80-110, 9 VAC 5-50-20, and 9 VAC 5-50-90)
- 12. Combustion Equipment Requirements (emission unit ID# FL-1B) Emission
  Limits Emissions from the operation of the candlestick flare, FL-1B, shall not exceed the limits specified below:

Total Suspended Particulate	7.4 tons/yr
PM-10	7.4 tons/yr
PM-2.5	7.4 tons/yr
Sulfur Dioxide	6.0 tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	29.5 tons/yr
Volatile Organic Compounds (as NMOCs)	0.8 tons/yr
Carbon Monoxide	160.4 tons/yr
Total Hazardous Air Pollutants	3.5 tons/yr

Annual emissions are to be determined for each 12-month consecutive period. (9 VAC 5-80-110 and Condition 16 of NSR permit issued July 29, 2011)

13. Combustion Equipment Requirements - (emission unit ID# GEN-1, GEN-2, GEN-3, and GEN-4) - Emission Limits - Emissions from the operation of the four (4) LFG-fired engine driven generators (combined) shall not exceed the limits specified below:

Total Suspended Particulate	5.3 tons/yr
PM-10	5.3 tons/yr
PM-2.5	5.3 tons/yr
Sulfur Dioxide	2.5 tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	63.0 tons/yr
Volatile Organic Compounds (as NMOCs)	0.5 tons/yr
Carbon Monoxide	82.3 tons/yr
Total Hazardous Air Pollutants	1.4 tons/yr

Annual emissions are to be determined for each 12-month consecutive period. (9 VAC 5-80-110 and Condition 8 in NSR permit issued August 18, 1995)

- 14. Combustion Equipment Requirements (emission unit ID# FL-1B) Visible Emissions Limit The candlestick flare, FL-1B, when utilized, shall be operated with no visible emissions, as determined by EPA Method 22 (reference 40 CFR 60, Appendix A), except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours. This condition applies at all times except for start-up, shutdown, and malfunction. (9 VAC 5-80-110, 40 CFR 60.18, and Condition 16 of NSR permit issued July 29, 2011)
- 15. Combustion Equipment Requirements (emission unit ID# GEN-1, GEN-2, GEN-3, and GEN-4) Visible Emissions Limit Visible emissions from any of the four (4) LFG-fired engine exhaust stacks shall not exceed five percent (5%) opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). A visible emissions evaluation (VEE) shall be conducted on each of the engine exhaust stacks. This condition applies at all times except during start-up, shutdown, and malfunction.

  (9 VAC 5-80-110 and Condition 9 of NSR permit issued August 18, 1995)
- 16. Combustion Emissions Requirement (emission unit ID# FL-1B, GEN-1, GEN-2, GEN-3, and GEN-4) Combustion emissions from the candlestick flare and LFG-fired engines shall be controlled by proper operation and maintenance. Equipment operators shall be trained in the proper operation of all such devices. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. (9 VAC 5-80-110)
- 17. Combustion Equipment Requirements (emission unit ID# FL-1B, GEN-1, GEN-2, GEN-3, and GEN-4) A copy of the August 18, 1995 and July 29, 2011 NSR permits shall be maintained on the premises of the landfill facility.
  (9 VAC 5-80-110 and Condition 17 of NSR permit issued August 18, 1995 and Condition 31 of NSR permit issued July 29, 2011)

- 18. Landfill Operation Requirements Start-up, Shutdown, and Malfunction Plan As an affected source, the SPSA Regional Landfill is categorized as a 'new/reconstructed landfill' in 40 CFR Part 63, Subpart AAAA. The additional requirements beyond those imposed in the NSPS include development of the 'SSM' plan and the start of semi-annual reporting for the GCCS system, beginning January 16, 2003. (9 VAC 5-80-110 and 40 CFR 63.1930 through 63.1990)
- 19. Landfill Operation Requirements Wellhead Pressure Monitoring The permittee shall measure the gauge pressure in the header at each individual active well monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within five (5) calendar days. If a negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the system shall be expanded within 120 days of the initial measurement of positive pressure. Exceptions to this requirement are listed under 40 CFR 60.753 (b)(1)-(b)(3). If corrective actions are taken as specified in 60.755, the monitored exceedance is not a violation of the operational requirements. (9 VAC 5-80-110 and 40 CFR 60.755(a)(3))
- 20. Landfill Operation Requirements Wellhead Parameters Monitoring The permittee shall monitor each active well monthly for temperature and nitrogen or oxygen as specified in Condition 3 of this permit. If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within five (5) calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the LFG collection system shall be expanded to correct the exceedance within 120 calendar days of the initial exceedance.

  (9 VAC 5-80-110 and 40 CFR 60.755(a)(5))
- 21. Landfill Operation Requirements Surface Methane Monitoring The permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that transverses the landfill at 30 meter intervals for each collection area for which waste has been in place for two (2) or more years if closed or at final grade or for which waste has been in place for five (5) or more years if active. This surface methane monitoring shall take place on a quarterly schedule and using an organic vapor analyzer, flame ionization detector or other portable monitor meeting the specifications provided in paragraph (d) of 40 CFR 60.755. Areas with steep slopes, the active working face or other dangerous areas may be excluded from this monitoring as approved by the Director of the DEQ Tidewater Regional Office.

  (9 VAC 5-80-110 and 40 CFR 60.755(c)(1))
- 22. Landfill Operation Requirements Surface Methane Exceedances Any reading of surface methane of 500 ppm or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements.
  - a. The location of the exceedance shall be marked and recorded;
  - b. The permittee shall perform cover maintenance or make adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of the exceedance. The location shall be re-monitored within 10 calendar days of detecting the exceedance;

- c. If the re-monitoring of the location shows a second exceedance, the permittee shall take additional corrective action and shall monitor the location again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the location, the permittee shall install a new well or other collection device within 120 calendar days after the initial exceedance;
- d. Any location that initially showed an exceedance but has methane concentration less than 500 ppm above background at the 10-day re-monitoring shall be re-monitored one (1) month from the initial exceedance. If the one-month re-monitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring. If the one-month re-monitoring shows an exceedance, the permittee shall repeat the requirements of either paragraph (c) or (e) of this condition; and
- e. For any location where the monitored methane concentration equals or exceeds 500 ppm above background three (3) times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes, or control devices, and a corresponding timeline for installation may be submitted to the Director of the DEQ Tidewater Regional Office.

(9 VAC 5-80-110 and 40 CFR 60.755(c)(4)(i) through 60.755 (c)(4)(v))

- 23. Landfill Operation Requirements Surface Cover Integrity Monitoring The permittee shall implement a program to monitor for surface cover integrity and accomplish cover repairs as necessary on a monthly basis.

  (9 VAC 5-80-110 and 40 CFR 60.755(c)(4))
- 24. Landfill Operation Requirements Sampling Ports for Parametric Monitoring The permittee shall install a sampling port and a port for temperature measurements at each wellhead. The permittee shall measure the gauge pressure in the LFG collection header on a monthly schedule. The permittee shall monitor nitrogen or oxygen concentrations in the LFG on a monthly schedule. The permittee shall monitor the temperature of the LFG on a monthly schedule.

  (9 VAC 5-80-110 and 40 CFR 60.756(a))
- 25. Landfill Operation Requirements Monitoring Devices The GCCS shall be equipped with a gas flow rate measuring device that records the flow of LFG to all combustion devices at least every 15 minutes. Individual LFG volumes to the (1) gas-fired engines, (2) Flare, and (3) Off-site devices shall be recorded on a daily basis. The flare, FL-1B, shall be equipped with a temperature-monitoring device equipped with a continuous recorder to ensure the proper operation of the flare on a continuing basis. Each monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the GCCS is operating. (9 VAC 5-80-110, 9 VAC 5-50-20 C, 40 CFR 60.756(b)(1) &(b)(2), Condition 3 of NSR permit issued August 18, 1995, and Condition 8 of NSR permit issued July 29, 2011)

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- 26. Combustion Equipment Requirements - (emission unit ID# GEN-1, GEN-2, GEN-3, and GEN-4) - Periodic Monitoring - The permittee or co-operator shall perform periodic visual emission evaluations (VEE) on each LFG-fired engine at least once per calendar week. The observations shall be conducted during daylight hours and under normal operating conditions, for at least a one-minute period to determine compliance with the opacity standards for fuel burning equipment. If no visible emissions are observed, no further action shall be required. However, if visible emissions are noted, the permittee shall take appropriate action immediately to return the unit to normal operations such that no visible emissions exist. If such corrective action fails to correct the problem, the permittee or co-operator shall conduct a VEE for a period of six (6) minutes (24) consecutive observations at 15-second intervals) using Method 9 (40 CFR 60, Appendix A). If the six-minute VEE opacity average exceeds five percent (5%), the VEE shall continue for an additional 12 minutes. If any of the six-minute averages exceeds ten percent (10%) opacity during the 18 minutes, the VEE shall continue for one (1) hour from initiation, to determine compliance with the opacity limit. The permittee shall record the details of the visual emissions observations and any corrective actions taken. (9 VAC 5-80-110 E)
- 27. Combustion Equipment Requirements - (emission unit ID# FL-1B) - Periodic Monitoring - The permittee or co-operator shall perform periodic visual emission evaluations (VEE) on the candlestick flare, FL-1B, at least once per calendar week, when operating. The observations shall be conducted during daylight hours and under normal operating conditions, for at least a one-minute period to compliance with the opacity standards for fuel burning equipment. If no visible emissions are observed, no further action shall be required. However, if such periodic evaluations indicate any visible emissions, the permittee shall take appropriate action immediately, to return the unit to normal operation such that no visible emissions exist. If such corrective action fails to correct the problem, the permittee or co-operator shall conduct a visible emissions evaluation (VEE) utilizing EPA Method 22 (reference 40 CFR 60, Appendix A). If a Method 22 evaluation and/or corrective action become necessary, the permittee or cooperator shall record the details of the incident in a logbook. The logbook shall be kept on site and available for inspection by the DEQ for the most recent five (5) year period. (9 VAC 5-80-110 E)
- 28. Landfill Operation Recordkeeping Wellhead Inspections The permittee shall record and maintain a logbook of wellhead inspections that indicates a positive pressure had existed and the corrective action taken to alleviate the abnormal condition at the wellhead. Exceptions to this requirement include; a fire or increased well temperature, use of a geomembrane or synthetic cover, or a decommissioned wellhead. (9 VAC 5-80-110 and 40 CFR 60.753 (b)(1) (3))
- 29. Landfill Operation Recordkeeping Surface Monitoring Design Plan The permittee shall develop and maintain a surface monitoring design plan that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals.

(9 VAC 5-80-110 and 40 CFR 60.753(d))

- 30. Landfill Operation Recordkeeping Landfill Design Capacity The permittee shall keep for at least five (5) years, current, readily accessible, on-site records of the design capacity report, based on the original report, dated May 1, 1996; the current amount of waste in place; and the annual placement rates for solid waste. Off-site records may be maintained if they are retrievable within four (4) hours. Either paper copy or electronic formats, approved by the DEQ, are acceptable.

  (9 VAC 5-80-110 and 40 CFR 60.758(a))
- 31. Landfill Operation Recordkeeping Operating Parameters The permittee shall maintain for five (5) years, readily accessible records of the following monitoring observations:
  - a. Wellhead gauge pressures measured monthly;
  - b. Wellhead temperatures measured monthly;
  - c. Wellhead nitrogen or oxygen concentrations measured monthly;
  - d. Flow rate of the LFG to the GCCS;
  - e. Results of the quarterly surface methane monitoring; and
  - f. Malfunction reports for control or collection devices. (9 VAC 5-80-110, 9 VAC 5-50-410, 40 CFR 60.753 (c) & (d), and 40 CFR 60.758(c))
- 32. Landfill Operation Recordkeeping Collection System The permittee shall keep for the life of the GCCS an up-to-date, readily accessible plot map showing each existing and planned collector in the system. The map shall also provide a unique identification location label for each collector. Additionally, each owner or operator shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors specified under 40 CFR 60.755(b).

  (9 VAC 5-80-110 and 40 CFR 60.758(d))
- 33. Landfill Operation Recordkeeping Collection System The permittee shall maintain for five (5) years, readily accessible records of all GCCS exceedances of the operational standards, including the readings taken in subsequent months showing a return to compliance, and the location where the exceedance occurred.

  (9 VAC 5-80-110 and 40 CFR 60.758(e))
- 34. Landfill Operation Recordkeeping Malfunctions The permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of the LFG GCCS, any malfunction of the on-site combustion devices, or any periods during which a continuous monitoring system or monitoring device is inoperative for more than one (1) hour.

  (9 VAC 5-80-110 and 40 CFR 60.758(c)(1))
- 35. Landfill Operation Recordkeeping Compliance All records, reports, and measurements required to demonstrate compliance with NSPS, Subpart WWW shall be prepared and submitted to the Director of the DEQ Tidewater Regional Office, as listed in 40 CFR 60.755.

(9 VAC 5-80-110, 9 VAC 5-50-50 and 40 CFR 60.755)

- 36. Combustion Equipment Recordkeeping (emission unit ID# FL-1B, GEN-1, GEN-2, GEN-3, and GEN-4) Training Records The permittee or co-operator shall maintain records of the required training, including a statement of the time, place and nature of the training provided. The permittee or co-operator shall have available good written operating procedures and a maintenance schedule for the combustion devices. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept at the permitted facility and made available for inspection by the DEQ. (9 VAC 5-80-110)
- 37. Combustion Equipment Testing (emission unit ID# GEN-1, GEN-2, GEN-3, and GEN-4) Emissions Testing The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports will be provided, as necessary, in order to facilitate testing at the appropriate locations.
  (9 VAC 5-80-110 and Condition 6 of NSR permit issued August 18, 1995)
- 38. Landfill Operation Testing (emission unit ID# GCCS) Nitrogen Testing If measured, the nitrogen level at each wellhead shall be determined by using EPA Method 3C.

  (9 VAC 5-80-110 and 40 CFR 60.753(c)(1))
- 39. Landfill Operation Testing (emission unit ID# GCCS) Oxygen Testing The oxygen level at each wellhead shall be determined by an oxygen meter using EPA Method 3A, except for the following:
  - a. The span be set so that the regulatory limit is between 20 and 50 percent (%) of the span;
  - b. A data recorder is not required;
  - c. Only a zero and a span calibration gas are required. Ambient air may be used as the span;
  - d. A calibration error check is not required; and
  - e. The allowable sample bias, zero drift, and calibration drift are plus-or-minus (±) ten percent (10%).
  - (9 VAC 5-80-110 and 40 CFR 60.753 (c)(2))
- 40. Landfill Operation Testing (emission unit ID# GCCS) Background Methane Concentrations The background concentration of methane during surface emissions monitoring shall be determined for the instrument measuring the surface concentrations of methane by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. Surface emission monitoring shall be performed in accordance with 40 CFR 60 Appendix A, Method 21, Section 4.3.1, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions. (9 VAC 5-80-110 and 40 CFR 60.755(b)(3))

- 41. Landfill Operation Testing (emission unit ID# GCCS) Surface Methane
  Concentrations The portable analyzer used to determine the surface methane
  concentration shall meet the instrument specifications provided in 40 CFR 60, Appendix
  A, Method 21, Section 3, except that methane shall replace all references to VOC. The
  calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air. To
  meet the performance evaluation requirements in section 3.1.3 of Method 21, the
  instrument evaluation procedures of Section 4.4 of Method 21 shall be used. The
  calibration procedures in Section 4.2 of Method 21 shall be followed immediately before
  commencing a surface monitoring survey.
  (9 VAC 5-80-110 and 40 CFR 60.755(d))
- 42. Combustion Equipment Testing (emission unit ID# FL-1B) Flared Gas Exit Velocity Concurrently with the visible emissions performance tests on the candlestick flare, FL-1B, the actual combusted gas exit velocity of the flare shall be determined by EPA Reference Methods 2, 2A, 2C, or 2D, as appropriate; by the unobstructed (free) cross-sectional area of the flare's main burner tip.

  (9 VAC 5-50-410 and 40 CFR 60.18(f)(3))
- 43. Combustion Equipment Testing - (emission unit ID# FL-1B, GEN-1, GEN-2, GEN-3, and GEN-4) - Initial Performance Testing - NSPS, Subpart WWW provides for alternate procedures other than initial performance testing, when adequate treatment of the LFG is performed on-site. The recognized treatment scenario includes dewatering. filtering with a 10-micron screen, and compression of the LFG prior to being combusted. Combustion devices on-site include a candlestick flare, FL-1B, and the four (4) LFG-fired engines, GEN-1, GEN-2, GEN-3 and GEN-4. SPSA and Suffolk Energy Partners, L.P. have indicated that the LFG will be treated on-site with dewatering by passing through three (3) knockouts, filtering through two (2) 10-micron screens, cooling in an air-to-air cooler, and compressing to eight (8) psig in a 300 horsepower blower before being transmitted to the LFG-fired engines, flare, and off-site devices, OS-1, 40 CFR 60.752(b)(2)(iii)(C) does not include an initial performance test for the LFG treatment control option. Therefore, any LFG energy recovery device, utilizing LFG from the facility, having met the treatment standards included in this condition, will not require an initial performance test of the control equipment.

(9 VAC 5-80-110, 9 VAC 5-50-30, 9 VAC 5-80-10 J, and 40 CFR 60.752(b)(2)(iii)(C))

44. Landfill Operation Reporting - NSPS, Subpart WWW and MACT, Subpart AAAA - On March 1<sup>st</sup> and September 1<sup>st</sup> of each calendar year, routine reports required by the Landfill MACT and the NSPS for the operation of the GCCS shall be submitted to the DEQ. The Table below outlines all reports required by the NSPS and Landfill MACT.

Report Name	Periods Covered	Report Due Dates	Permit Condition Number	Regulation Citations
NSPS and MACT Compliance	Jan. 1 <sup>st</sup> to June 30 <sup>th</sup> July 1 <sup>st</sup> to Dec. 31st	March 1st & Sept. 1st The annual report is now semi-annual	9, 18, and 36	40 CFR 60.753 to 60.757 and 40 CFR 63.1980 (a)
Landfill MACT SSM Report	Jan. 1 <sup>st</sup> to June 30 <sup>th</sup> July 1 <sup>st</sup> to Dec. 31st	March 1st & Sept. 1st	18 and 45	40 CFR 63.1980
GCCS Design Plan	None specified	As required by GCCS construction activities	1	40 CFR 60.752 (b)(2)(ii)(A) and 40 CFR 60.755
Semi-annual Monitoring	Jan. 1 <sup>st</sup> to June 30 <sup>th</sup> July 1 <sup>st</sup> to Dec. 31st	March 1st & Sept. 1st	68	9 VAC 5-80-110

<sup>(9</sup> VAC 5-80-110)

# 45. Landfill Operation Reporting - (emission unit ID# GCCS) - Important Reporting Details:

- a. Instances when positive pressure at a wellhead occurred due to efforts to avoid a fire. If no such instances occur, the permittee shall submit a negative report;
- Values and time periods for exceedances of pressure, temperature, nitrogen, or oxygen measurements at wellheads. Exceptions exist for pressure where a geomembrane or synthetic cover is used and for decommissioned wells;
- c. Any periods of GCCS equipment malfunction or diversion of the LFG stream exceeding one (1) hour, including dates and duration of the equipment outage;
- d. All instances when the GCCS was not operating for more than five (5) consecutive days;
- e. All instances where surface methane concentrations exceeded 500 ppm; the actual concentration recorded and location on the plot plan of that exceedance;
- f. Records of GCCS expansion, including dates, locations, and equipment installed in the process of expanding the GCCS; and
- g. Start-up, shutdown and malfunction (SSM) plan activity reports. (9 VAC 5-50-410, 40 CFR 60.757 (f), 40 CFR 60.753 (b)(1) and 40 CFR 63.1980)

46. Landfill Operation and Combustion Equipment Reporting - Performance Tests The permittee shall submit written notification to the Director of the DEQ Tidewater
Regional Office of the anticipated dates of performance tests, postmarked at least 30
calendar days prior to the date of the tests. Copies of these written notifications shall be
sent to:

Chief, Air Enforcement Branch (3AT20) U.S. Environmental Protection Agency Region III 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

(9 VAC 5-80-110, 9 VAC 5-50-410 and 40 CFR 60.7 (a))

### **Landfill Closure Requirements**

- 47. Landfill Closure Requirements GCCS Closure The GCCS may be capped in-place or removed provided that all of the following conditions have been satisfied:
  - a. The landfill shall be a closed landfill. A closed landfill is defined as a landfill in which solid waste is no longer being placed and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed in the General Provisions of 40 CFR 60. A closure report shall be submitted to the DEQ as provided in 40 CFR 60.757(d);
  - b. The GCCS shall have been operating for at least 15 years from installation; and
  - c. The calculated NMOC gas production shall be less than 50 Mg per year on three (3) successive test dates. The test dates shall be no less than 90 calendar days apart and no more than 180 calendar days apart.

(9 VAC 5-80-110, 9 VAC 5-50-410, 40 CFR 60.752(b)(2)(v) and 40 CFR 60.757(d))

48. Landfill Closure Requirements - NMOC Emission Rate - The permittee shall calculate the NMOC emission rate for purposes of determining when the GCCS can be removed using the following equation:

MNMOC =  $1.89 \times 10^{-3} \times QLFG \times CNMOC$  where:

MNMOC = mass emission rate of NMOC, Megagrams per year; QLFG = flow rate of landfill gas, cubic meters per minute; and CNMOC = NMOC concentration, ppmvd as hexane

a. QLFG shall be determined by measuring the total LFG flow rate at the common header pipe to the control device using a gas flow measuring device calibrated according to the provisions of 40 CFR 60, Appendix A, Method 2E, Section 4, or other methods approved by the Administrator; and

b. CNMOC shall be determined by collecting and analyzing LFG sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in EPA Method 25C or EPA Method 18. If using EPA Method 18, the minimum list of compounds to be tested shall be those published in the most recent version of AP-42. The sample location on the common header shall be located upstream of any condensate removal or other refining units. The permittee shall divide the NMOC concentration (as methane) from EPA Method 25C by the number six (6) to obtain the NMOC concentration as hexane.

(9 VAC 5-80-110, 9 VAC 5-50-410 and 40 CFR 60.754(b))

- 49. Landfill Closure Requirements Closure Report The permittee shall submit a closure report to the DEQ and the Administrator within 30 calendar days of waste acceptance cessation. The DEQ may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 9 VAC 20-80-250 E and F, and 40 CFR 258.60. If a closure report has been submitted, no additional wastes may be placed in the landfill without filing a notification of modification. (9 VAC 5-80-110, 9 VAC 5-50-410, and 40 CFR 60.757(d))
- 50. Landfill Closure Requirements Equipment Removal Report The permittee shall submit an equipment removal report to the DEQ at least 30 calendar days prior to removal or cessation of operation of the control equipment. The report shall contain the following:
  - a. A copy of the landfill closure report;
  - b. A copy of the GCCS start-up report demonstrating that the 15-year minimum control period has expired;
  - c. Dated copies of three (3) successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 Mg or greater of NMOC per year; and
  - d. DEQ may request additional information to verify that all conditions for removal have been met.
  - (9 VAC 5-80-110, 9 VAC 5-50-410, and 40 CFR 60.757(e))

# Facility Wide Conditions

- 51. Facility Wide Conditions Limitations The opacity standard (visible emission standard) shall apply at all times except during periods of start-up, shutdown, and malfunction.
  - (9 VAC 5-80-110 and 9 VAC 5-50-20 A)
- 52. Facility Wide Conditions Limitations At all times, including periods of start-up, shutdown, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the DEQ, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspections of the source.

(9 VAC 5-80-110, 9 VAC 5-50-20 E, 9 VAC 5-50-380, and 9 VAC 5-20-180 A)

- 53. Facility Wide Conditions Limitations In case of a shutdown or bypassing, or both, of air pollution control equipment for necessary scheduled maintenance which results in excess emissions for more than one (1) hour, the intent to shut down such equipment shall be reported to the DEQ, if any, at least 24 hours prior to the planned shutdown. Such prior notice shall include, but is not limited to, the following:
  - a. Identification of the specific air pollution control equipment to be taken out of service as well as its location and permit or registration number;
  - b. The expected length of time that the air pollution control equipment will be out of service;
  - c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period; and
  - d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage of the air pollution control equipment.
  - (9 VAC 5-80-110, 9 VAC 5-50-380, and 9 VAC 5-20-180)
- 54. Facility Wide Conditions Limitations In the event that any affected facility or related air pollution equipment fails or malfunctions in such a manner that may cause excess emissions for more than one (1) hour, the owner shall, as soon as is practicable but no later than four (4) daytime business hours, notify the DEQ by facsimile transmission, telephone, or electronic mail of such failure or malfunction and shall within two (2) weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the DEQ. (9 VAC 5-80-110, 9 VAC 5-50-380, and 9 VAC 5-20-180 C)
- 55. **Facility Wide Conditions Emission Limits -** Emissions from the operation of the MSW landfill facility shall not exceed the limits specified below:

Total Suspended Particulate	21.2 tons/yr
PM-10	21.2 tons/yr
PM-2.5	21.2 tons/yr
Sulfur Dioxide	8.5 tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	103.8 tons/yr
Volatile Organic Compounds (as NMOCs)	32.3 tons/yr
Carbon Monoxide	283.7 tons/yr
Total Hazardous Air Pollutants	20.5 tons/yr

Annual emissions are to be determined for each 12-month consecutive period (9 VAC 5-80-110)

- 56. Facility Wide Conditions Recordkeeping The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit and 40 CFR 60.758. The content and format of such records shall be arranged with the Director of the Tidewater Regional Office. These records shall include, but are not limited to:
  - a. Annual throughput of LFG to the LFG-fired engines, flare, and off-site devices (in million scf), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;
  - b. The total annual throughput of LFG (in million scf), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;
  - c. Annual placement of solid waste in the landfill, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;
  - d. All GCCS, LFG-fired engine, and flare system monitoring data, including any observations of opacity;
  - e. All visual emissions observations and VEEs for the engines and flare, including the date and time of the observations, whether or not visible emissions were noted, the results of any EPA Method 9 or Method 22 VEEs and any corrective action taken; and
  - f. The content and format of any such additional records shall be arranged with the DEQ Tidewater Regional Office. All records required by this condition and Subpart WWW (40 CFR 60.758) shall be made available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, 9 VAC 5-50-410, and 40 CFR 60.758)

### **Insignificant Emission Units**

57. Insignificant Emission Units - The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity 9 VAC 5-80-720 C)
03	Ferrous Metals Recovery	5-80-720B	PM	N/A
04	Tire Shredding	5-80-720B	PM	N/A
05	Leachate Lagoon	5-80-720B	VOCs	N/A
06	Diesel Storage Tank	5-80-720C	VOCs	10,000 gallons
07	Diesel Storage Tank	5-80-720C	VOCs	10,000 gallons
08	Hydraulic Oil Tank	5-80-720C	VOCs	3,000 gallons
09	Motor Oil Tank	5-80-720C	VOCs	2,500 gallons
10	Waste Oil Tank	5-80-720C	VOCs	2,000 gallons
11	Diesel Water Tank	5-80-720C	POCs	100 HP

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

### Permit Shield & Inapplicable Requirements

58. Permit Shield & Inapplicable Requirements - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60, Subpart Cc	Emission Guidelines for Control of Existing Sources: Municipal Solid Waste Landfills	This Subpart is not applicable to the landfill because of recent modifications to the facility
40 CFR 60, Subpart WWW		
40 CFR 63, Subpart AAAA	Landfill MACT	Recordkeeping and reporting requirements of the Landfill MACT do not apply to fuel burning units that combust treated LFG
40 CFR 63, Subpart ZZZZ	RICE MACT	Engines combusting LFG equivalent to ten percent or more of the gross heat input on an annual basis are not subject to the MACT
40 CFR 60, Subpart JJJJ	Stationary Spark-Ignited Engines New Source Performance Standard	This Subpart is not applicable to the four (4) IC gas engines because their construction date precedes the NSPS applicability dates.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-140)

#### **General Conditions**

59. General Conditions - Federal Enforceability - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

- 60. General Conditions Permit Expiration This permit has a fixed term of five (5) years. The expiration date shall be the date five (5) years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

  (9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)
- 61. General Conditions Permit Expiration The owner shall submit an application for renewal at least six (6) months but no earlier than 18 months prior to the date of permit expiration.

  (9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)
- 62. General Conditions Permit Expiration If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the DEQ takes final action on the application under 9 VAC 5-80-150.

  (9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)
- 63. General Conditions Permit Expiration No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.

  (9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
- 64. General Conditions Permit Expiration If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the DEQ fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

  (9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)
- 65. General Conditions Permit Expiration-The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application.

  (9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)
- 66. General Conditions Recordkeeping and Reporting All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;

- d. The analytical techniques or methods used;
- e. The results of such analyses; and
- f. The operating conditions existing at the time of sampling or measurement. (9 VAC  $5-80-110 \,\mathrm{F}$ )
- 67. General Conditions Recordkeeping and Reporting Records of all monitoring data and support information shall be retained for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (9 VAC 5-80-110 F)
- 68. General Conditions Recordkeeping and Reporting The permittee shall submit the results of monitoring contained in any applicable requirement to the DEQ no later than March 1<sup>st</sup> and September 1<sup>st</sup> of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
  - a. The time period included in the report. The time periods to be addressed are January 1<sup>st</sup> to June 30<sup>th</sup> and July 1<sup>st</sup> to December 31<sup>st</sup>.
  - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
    - (1) Exceedance of emission limitations or operational restrictions;
    - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM), which indicates an exceedance of emission limitations or operational restrictions; or
    - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
  - c. If there were no deviations from permit conditions during the time period, the
    permittee shall include a statement in the report that "no deviations from permit
    requirements occurred during this semi-annual reporting period."
     (9 VAC 5-80-110 F)
- 69. General Conditions Annual Compliance Certification Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1<sup>st</sup> each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31<sup>st</sup> The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
  - a. The time period included in the certification. The time period to be addressed is January 1<sup>st</sup> to December 31<sup>st</sup>;

- b. The identification of each term or condition of the permit that is the basis of the certification;
- c. The compliance status;
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
- e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
- f. Such other facts as the permit may require to determine the compliance status of the source: and
- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address: R3 APD Permits@epa.gov (9 VAC 5-80-110 K.5)
- 70. General Conditions - Permit Deviation Reporting - The permittee shall notify the Director of the Tidewater Regional Office within four (4) daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 calendar days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. The occurrences should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 68 of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

71. General Conditions - Failure/Malfunction Reporting - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one (1) hour, the owner shall, as soon as practicable but no later than four (4) daytime business hours after the malfunction is discovered, notify the Director of the Tidewater Regional Office by facsimile transmission, telephone or electronic mail of such failure or malfunction and shall within 14 calendar days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director of the Tidewater Regional Office.

(9 VAC 5-20-180 C)

- 72. General Conditions Severability The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

  (9 VAC 5-80-110 G.1)
- 73. General Conditions Duty to Comply The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

  (9 VAC 5-80-110 G.2)
- 74. General Conditions Need to Halt or Reduce Activity not a Defense It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

  (9 VAC 5-80-110 G.3)
- 75. General Conditions Permit Modification A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

  (9 VAC 5-80-190 and 9 VAC 5-80-260)
- 76. General Conditions Property Rights The permit does not convey any property rights of any sort, or any exclusive privilege.
  (9 VAC 5-80-110 G.5)
- 77. General Conditions Duty to Submit Information The permittee shall furnish to the DEQ, within a reasonable time, any information that the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the DEQ along with a claim of confidentiality.

  (9 VAC 5-80-110 G.6)
- 78. General Conditions Duty to Submit Information Any document (including reports) required in a permit condition to be submitted to the DEQ shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G. (9 VAC 5-80-110 K.1)

79. General Conditions - Duty to Pay Permit Fees - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15<sup>th</sup> of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

- 80. General Conditions Fugitive Dust Emission Standards During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
  - a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
  - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
  - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
  - d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and
  - The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
     (9 VAC 5-50-90)
- 81. General Conditions Startup, Shutdown, and Malfunction At all times, including periods of startup, shutdown, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the DEQ, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

  (9 VAC 5-50-20 E)

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- 82. General Conditions Alternative Operating Scenarios Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

  (9 VAC 5-80-110 J)
- 83. General Conditions Inspection and Entry Requirements The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
  - a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - d. Sample or monitor at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
     (9 VAC 5-80-110 K.2)
- 84. General Conditions Reopening For Cause The permit shall be reopened by the DEQ if additional federal requirements become applicable to a major source with a remaining permit term of three (3) years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:
  - a. The permit shall be reopened if the DEQ or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
  - b. The permit shall be reopened if the administrator or the DEQ determines that the permit must be revised or revoked to assure compliance with the applicable requirements; and
  - c. The permit shall not be reopened by the DEQ if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.
  - (9 VAC 5-80-110 L)

- 85. General Conditions Permit Availability Within five (5) days after receipt of the
  - issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to the DEQ upon request.

(9 VAC 5-80-150 E)

- 86. General Conditions Transfer of Permits No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.

  (9 VAC 5-80-160)
- 87. General Conditions Transfer of Permits In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the DEQ of the change in ownership within 30 calendar days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.

  (9 VAC 5-80-160)
- 88. General Conditions Transfer of Permits In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the DEQ of the change in source name within 30 calendar days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)
- 89. General Conditions Malfunction as an Affirmative Defense A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of Condition 90 in this permit are met.

  (9 VAC 5-80-250)
- 90. General Conditions Malfunction as an Affirmative Defense The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction;
  - b. The permitted facility was at the time being properly operated;
  - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. The permittee notified the DEQ of the malfunction within two (2) working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

(9 VAC 5-80-250)

- 91. General Conditions Malfunction as an Affirmative Defense In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

  (9 VAC 5-80-250)
- 92. General Conditions Malfunction as an Affirmative Defense The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

  (9 VAC 5-80-250)
- 93. General Conditions Permit Revocation or Termination for Cause A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The DEQ may suspend, under such conditions and for such period of time as the DEQ may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

  (9 VAC 5-80-190 C and 9 VAC 5-80-260)
- 94. General Conditions Duty to Supplement or Correct Application Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

  (9 VAC 5-80-80 E)
- 95. General Conditions Stratospheric Ozone Protection If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (40 CFR Part 82, Subparts A F)

- 96. General Conditions Emissions Trading Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
  - a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance;
  - b. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions; and
  - c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.
     (9 VAC 5-80-110 I)

### **State-Only Enforceable Requirements**

- 97. State-Only Enforceable Requirements The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.
  - 9 VAC 5 Chapter 50, Part II, Article 2: Standards of Performance for Odorous Emissions.
  - 9 VAC Chapter 50, Part II, Article 3: Standards of Performance for Toxic Pollutants. (9 VAC 5-80-110 N and 9 VAC 5-80-300)